

# COMMONWEALTH of VIRGINIA

# DEPARTMENT OF ENVIRONMENTAL QUALITY

Permit No.: VA0082058 Effective Date:

Expiration Date:

### AUTHORIZATION TO DISCHARGE UNDER THE

# VIRGINIA POLLUTION DISCHARGE ELIMINATION SYSTEM

#### AND

#### THE VIRGINIA STATE WATER CONTROL LAW

In compliance with the provisions of the Clean Water Act as amended and pursuant to the State Water Control Law and regulations adopted pursuant thereto, the following owner is authorized to discharge in accordance with the information submitted with the permit application, and with this permit cover page and Parts I and II of this permit, as set forth herein.

Owner: Westmoreland County School Board

Facility Name: Washington District Elementary School WWTP

County: Westmoreland

Facility Location: 454 Oak Grove Rd, Oak Grove VA 22443

The owner is authorized to discharge to the following receiving stream:

Stream: Unnamed Tributary to Mattox Creek

River Basin: Potomac River River Subbasin: Potomac River

Section: 1a Class: III Special Standards: None

Water Per	mit Manager, Piedmont Regional Office
	Data

# A. Limitations and Monitoring Requirements

1. During the period beginning with the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to discharge from Outfall 001. This discharge shall be limited and monitored by the permittee as specified below:

	DISCHARGE LIMITATIONS						MONITORING REQUIREMENTS	
EFFLUENT CHARACTERISTICS	MONTHLY AVERAGE		WEEKLY AVERAGE		MINIMUM	MAXIMUM	FREQUENCY	SAMPLE TYPE
Flow (MGD) (a)	NL		NA		NA	NL	1/Day	Estimate
pH (standard units)	NA		NA		6.0	9.0	1/Day	Grab
cBOD <sub>5</sub> (b)	10 mg/L	230 g/d	15 mg/L	340 g/d	NA	NA	1/Month	Grab
Total Suspended Solids (TSS) (b)	10 mg/L	230 g/d	15 mg/L	340 g/d	NA	NA	1/Month	Grab
Fecal Coliform	200 N / 100 mL (Geometric Mean)		NA		NA	NL	4/Month (between 10am and 4pm)	Grab
Enterococci (d)	35 N / 100 mL (Geometric Mean)		NA		NA	NL	4/Month (between 10am and 4pm)	Grab
E.Coli (d)	126 N / 100 mL (Geometric Mean)		NA		NA	NL	4/Month (between 10am and 4pm)	Grab
Total Kjeldahl Nitrogen (TKN) (b)	3.0 mg/L	68 g/d	4.5 mg/L	100 g/d	NA	NA	1/Month	Grab
Total Residual Chlorine (TRC) (c)	0.0094 mg/L		0.012 mg/L		NA	NA	1/Day	Grab
Dissolved Oxygen (DO)	NA Nacitaria		NA		6.9 mg/L	NA	1/Day	Grab

<sup>&</sup>quot;NL" means no limitation is established. Monitoring and reporting however are required.

- (a) The design flow of this treatment facility is 0.0060 MGD (6,000 gpd). See Part I.C.1 for additional flow requirements.
- (b) These limitations are expressed in two significant figures
- (c) Additional TRC limitations and requirements are contained in Part I.B
- (d) "4/Month" means four samples, taken at least 7 days apart, in one calendar month.
- 2. There shall be no discharge of floating solids or visible foam in other than trace amounts.
- 3. Effluent samples shall be taken after post aeration.

<sup>&</sup>quot;NA" means not applicable.

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# B. Additional TRC Limitations and Monitoring Requirements

- 1. The permittee shall monitor the TRC at the outlet of each operating chlorine contact tank once (1) per day by grab sample.
- 2. No more than three (3) of all samples taken at the outlet of each chlorine contact tank shall be less than **1.5** mg/l for any one calendar month. (DMR # 157)
- No TRC sample collected at each outlet of the chlorine contact tank shall be less than 0.60 mg/l (DMR # 213).
- 4. If dechlorination facilities exist the samples above shall be collected prior to dechlorination.
- 5. If chlorine disinfection is not used, *E. coli*, enterococci, and Fecal coliform shall be limited and monitored by the permittee as specified below, and this requirement, if applicable, shall substitute for the TRC and *E. coli* / enterococci / Fecal coliform requirements delineated elsewhere in Part I of this permit.

	MONTHLY AVERAGE	FREQUENCY	SAMPLE TYPE
E. coli (N/100 ml)	126*	1/Week (between 10am-4pm)	Grab
Enterococci (N/100 ml)	35*	1/Week (between 10am-4pm)	Grab
Fecal coliform (N/100 ml)	200*	1/Week (between 10am-4pm)	Grab

<sup>\*</sup> Monthly Geometric Mean

# C. Other Requirements or Special Conditions

- 1. 95% Capacity Reopener: A written notice and a plan of action for ensuring continued compliance with the terms of this permit shall be submitted to the DEQ, Piedmont Regional Office when the monthly average flow influent to the sewage treatment works reaches 95 percent of the design capacity authorized in this permit for each month of any three consecutive month period. The written notice shall be submitted within 30 days and the plan of action shall be received at the Piedmont Regional Office no later than 90 days from the third consecutive month for which the flow reached 95 percent of the design capacity. The plan shall include the necessary steps and a prompt schedule of implementation for controlling any current or reasonably anticipated problem resulting from high influent flows. Failure to submit an adequate plan in a timely manner shall be deemed a violation of the permit.
- 2. Operations and Maintenance Manual Requirement: The permittee shall review the existing Operations and Maintenance (O & M) Manual and notify the DEQ Piedmont Regional Office, in writing, within 90 days of the effective date of this permit whether it is still accurate and complete. If the O & M Manual is no longer accurate and complete, a revised O & M Manual shall be submitted for approval to the DEQ Piedmont Regional Office within 90 days of the effective date of this permit. The permittee will maintain an accurate, approved operation and maintenance manual for the treatment works. This manual shall detail the practices and procedures which will be followed to ensure compliance with the requirements of the permit. The permittee shall operate the treatment works in accordance with the approved O&M Manual. This manual shall include, but not necessarily be limited to, the following items, as appropriate:

- a. Techniques to be employed in the collection, preservation and analysis of effluent and sludge samples;
- b. Procedures for measuring and recording the duration and volume of treated wastewater discharged:
- c. Discussion of Best Management Practices, if applicable;
- d. Treatment works design, treatment works operation, routine preventive maintenance of units within the treatment works, critical spare parts inventory and record keeping;
- e. Procedures for handling, storing, and disposing of all waste, fluids, and pollutants characterized in Part I.C.8 that will prevent these materials from reaching state waters, and;
- f. A plan for the management and/or disposal of waste solids and residues.

Any changes in the practices and procedures followed by the permittee shall be documented and submitted for DEQ Regional staff approval within 90 days of the effective date of the changes. Upon approval of the submitted manual changes, the revised manual becomes an enforceable part of the permit. Noncompliance with the O & M Manual shall be deemed a violation of the permit.

- 3. **Licensed Operator Requirement:** The permittee shall employ or contract at least one Class III licensed wastewater works operator for this facility. The license shall be issued in accordance with Title 54.1 of the Code of Virginia and the regulations of the Board for Waterworks and Wastewater Works Operators. The permittee shall notify the Department in writing whenever he is not complying, or has grounds for anticipating he will not comply with this requirement. The notification shall include a statement of reasons and a prompt schedule for achieving compliance.
- 4. **Reliability Class**: The permitted treatment works shall meet Reliability Class I.
- 5. Sludge Use and Disposal: The permittee shall conduct all sewage sludge use or disposal activities in accordance with the Sludge Management Plan (SMP) approved with the issuance of this permit. Any proposed changes in the sewage sludge use or disposal practices or procedures followed by the permittee shall be documented and submitted for DEQ approval 90 days prior to the effective date of the changes. Upon approval, the revised SMP becomes an enforceable part of the permit. The permit may be modified or alternatively revoked and reissued to incorporate limitations or conditions necessitated by substantive changes in sewage sludge use or disposal practices.
- 6. **Sludge Reopener**: The Board may promptly modify or revoke and reissue this permit if any applicable standard for sewage sludge use or disposal promulgated under Section 405(d) of the Clean Water Act is more stringent than any requirements for sludge use or disposal in this permit, or controls a pollutant or practice not limited in this permit.

# 7. Compliance Reporting:

a. The quantification levels (QL) shall be less than or equal to the following concentrations:

Effluent Characteristic	Quantification Level		
cBOD₅	5 mg/L		
TSS	1.0 mg/L		
TKN	0.50 mg/L		
TRC	0.10 mg/L		

The QL is defined as the lowest concentration used to calibrate a measurement system in

accordance with the procedures published for the method. It is the responsibility of the permittee to ensure that proper quality assurance/quality control (QA/QC) protocols are followed during the sampling and analytical procedures. QA/QC information shall be documented to confirm that appropriate analytical procedures have been used and the required QLs have been attained. The permittee shall use any method in accordance with Part II A of this permit.

## b. Reporting

Monthly Average -- Compliance with the monthly average limitations and/or reporting requirements for the parameters listed in subsection a. of this permit condition shall be determined as follows: All concentration data below the QL used for the analysis (QL must be less than or equal to the QL\_listed in a. above) shall be treated as zero. All concentration data equal to or above the QL used for the analysis (QL must be less than or equal to the QL listed in a. above) shall be treated as it is reported. An arithmetic average shall be calculated using all reported data for the month, including the defined zeros. This arithmetic average shall be reported on the Discharge Monitoring Report (DMR) as calculated. If all data are below the QL used for the analysis (QL must be less than or equal to the QL listed in a. above), then the average shall be reported as "<QL". If reporting for quantity is required on the DMR and the reported monthly average concentration is <QL, then report "<QL" for the quantity. Otherwise use the reported concentration data (including the defined zeros) and flow data for each sample day to determine the daily quantity and report the monthly average of the calculated daily quantities

Weekly Average -- Compliance with the weekly average limitations and/or reporting requirements for the parameters listed in subsection a. of this permit condition shall be determined as follows: All concentration data below the QL used for the analysis (QL must be less than or equal to the QL listed in a. above) shall be treated as zero. All concentration data equal to or above the QL used for the analysis (QL must be less than or equal to the QL listed in a. above) shall be treated as reported. An arithmetic average shall be calculated using all reported data, including the defined zeros, collected within each complete calendar week and entirely contained within the reporting month. The maximum value of the weekly averages thus determined shall be reported on the DMR. If all data are below the QL used for the analysis (QL must be less than or equal to the QL listed in a. above), then the weekly average shall be reported as "<QL". If reporting for quantity is required on the DMR and the reported weekly average concentration is <QL, then report "<QL" for the quantity. Otherwise use the reported concentration data (including the defined zeros) and flow data for each sample day to determine the daily quantity and report the maximum weekly average of the calculated daily quantities.

- c. Any single datum required shall be reported as "<QL" if it is less than the QL\_used for the analysis (QL must be less than or equal to the QL listed in a. above). Otherwise the numerical value shall be reported.
- d. The permittee shall report at least the same number of significant digits as the permit limit for a given parameter. Regardless of the rounding convention used by the permittee (i.e., 5 always rounding up or to the nearest even number), the permittee shall use the convention consistently, and shall ensure that consulting laboratories employed by the permittee use the same convention.
- 8. **Materials Storage and Handling:** Any and all product, materials, industrial wastes, and/or other wastes resulting from the purchase, sale, mining, extraction, transport, preparation, and/or storage of raw or intermediate materials, final product, by-product or wastes, shall be handled, disposed of, and/or stored in such a manner and consistent with Best Management Practices, so

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as not to permit a discharge of such product, materials, industrial wastes, and/or other wastes to State waters, except as expressly authorized.

- 9. **Total Maximum Daily Load (TMDL) Reopener**: This permit shall be modified or alternatively revoked and reissued if any approved wasteload allocation procedure, pursuant to Section 303(d) of the Clean Water Act, imposes wasteload allocations, limits or conditions on the facility that are not consistent with the permit requirements.
- 10. Indirect Dischargers: The permittee shall provide adequate notice to the Department of the following:
  - Any new introduction of pollutants into the treatment works from an indirect discharger which would be subject to Section 301 or 306 of the Clean Water Act and the State Water Control Law if it were directly discharging those pollutants; and
  - b. Any substantial change in the volume or character of pollutants being introduced into the treatment works by a source introducing pollutants into the treatment works at the time of issuance of this permit.

Adequate notice shall include information on (i) the quality and quantity of effluent introduced into the treatment works, and (ii) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the treatment works.

- 11. CTC, CTO Requirement: The permittee shall, in accordance with the DEQ Sewage Collection and Treatment Regulation (9VAC25-790), obtain a Certificate to Construct (CTC), and a Certificate to Operate (CTO) from the DEQ Office of Wastewater Engineering (for Water Quality Improvement Funded (WQIF) projects) or submitted by the design engineer and owner to the DEQ regional water permit manager (for non WQIF projects) prior to constructing wastewater treatment works and operating the treatment works, respectively. Non-compliance with the CTC or CTO shall be deemed a violation of the permit.
- 12. **Nutrient Reopener:** This permit may be modified or, alternatively, revoked and reissued to incorporate alternative nutrient limitations and/or monitoring requirements, should:
  - a. the State Water Control Board adopt new nutrient standards for the water body receiving the discharge, including the Chesapeake Bay or its tributaries, or
  - b. a future water quality regulation or statute require new or alternative nutrient control.
- 13. Treatment Works Closure Plan: If the permittee plans an expansion or upgrade to replace the existing treatment works, or if facilities are permanently closed, the permittee shall submit to the DEQ Regional Office a closure plan for the existing treatment works. The plan shall address the following information as a minimum: Verification of elimination of sources and/or alternate treatment scheme; treatment, removal and final disposition of residual wastewater and solids; removal/demolition/disposal of structures, equipment, piping and appurtenances; site grading, and erosion and sediment control; restoration of site vegetation; access control; fill materials; and proposed land use (post-closure) of the site. The plan should contain proposed dates for beginning and completion of the work. The plan must be approved by the DEQ prior to implementation.
- 14. **Tie into Central Sewage Treatment Facility**: The permittee shall tie into a central sewage treatment facility if and when one becomes available.